Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently Amended) A method for reassigning codes of an orthogonal variable spreading factor (OVSF) code tree in a code division multiple access communication system, the code tree having a plurality of codes at differing spreading factors and having a plurality of branches between the codes of different spreading factors, if a particular code of the code tree is assigned, a lower spreading factor code of the code tree connected to that code by one of the branches is blocked from assignment, if a code of the code tree is blocked, a code of the tree of a lower spreading factor connected to that code by one of the branches is blocked from assignment, the method comprising:

starting at a first spreading factor:

(a) determining selected assigned codes of that spreading factor that can be reassigned to other codes of that spreading factor in a desired direction of the code tree; and

(b) reassigning the selected assigned codes to the other codes; and

(c) for each other spreading factor, repeating steps (a) and (b).

2.   (Original)   The method of claim 1 wherein the other codes are within a same time slot as the selected codes.

3.   (Original)   The method of claim 1 wherein at the least one of the other codes is in a different time slot than the selected codes.

4.   (Original)   The method of claim 1 wherein steps (a) and (b) are only performed if under a threshold number of codes are blocked in a time slot.

5.   (Original)   The method of claim 1 wherein a number of the reassigned codes is limited.

6.   (Original)   The method of claim 1 wherein the first spreading factor is a highest spreading factor.

7.   (Currently Amended)   A radio network controller (RNC) having a radio resource management device, the radio resource management device having a memory for storing a representation of an orthogonal variable spreading factor (OVSF) code tree, the code tree having a plurality of codes at differing spreading factors and having a plurality of branches between the codes of different spreading

factors, if a particular code of the code tree is assigned, a lower spreading factor code of the code tree connected to that code by one of the branches is blocked form assignment, if a code of the code tree is blocked, a code of the tree of a lower spreading factor connected to that code by one of the branches is blocked from assignment, the radio resource management device capable of performing steps comprising:

starting at a highest spreading factor:

(a) determining selected assigned codes of that spreading factor that can be reassigned to other codes of that spreading factor in a desired direction of the code tree; and

(b) reassigning the selected assigned codes to the other codes; and

(c) for each lower spreading factor in sequence, repeating steps (a) and (b).

8. (Original) The RNC of claim 7 wherein the other codes are within a same time slot as the selected codes.

9. (Original) The RNC of claim 7 wherein at the least one of the other codes is in a different time slot than the selected codes.

10.   (Original)   The RNC of claim 7 wherein steps (a) and (b) are only performed if under a threshold number of codes are blocked in a time slot.

11.   (Original)   The RNC of claim 7 wherein a number of the reassigned codes is limited.

12.   (Original)   The RNC of claim 7 wherein the representation of the code tree is stored as a vector.

13.   (Original)   The RNC of claim 12 wherein the vector includes an element for each code of the code tree in sequence.

14.   (Original)   The RNC of claim 13 wherein all the element of codes having a same spreading factor are contiguous.

15.   (Original)   The RNC of claim 13 wherein each element has two bits, one bit of the two bits indicating whether the code of that element is blocked and another bit of the two bits indicating whether one or multiple codes are blocked by the code of that element.

16. (Currently Amended)   A method for assigning, de-allocating or updating codes in an orthogonal variable spreading factor (OVSF) code tree, the tree having rows and each successive row down the tree having double a spreading factor of a preceding row, the method comprising:

providing <u>a numeric value to</u> each code <s>a numeric value</s>, wherein each code in a row lower in the tree has a <u>numeric</u> value at least twice that of the <s>assigned</s> numeric value of <u>a code in a higher row</u> <s>the numeric value assigned to that code</s>; and

assigning, de-allocating or updating codes in an <s>orthogonal variable spreading factor (OVSF)</s> <u>OVSF</u> code tree using the numeric value <s>provided code</s>.

17. (Original)   The method of claim 16 wherein the providing each code a numeric value includes using a binary tree where each node represents a channelization code and providing a numeric value for each node, wherein the numeric value of a lowest spreading factor is one and the two children nodes of each parent node are assigned a numeric value equal to twice the numeric value of that parent node or twice the numeric value of that parent node plus one.

18. (Original) The method of claim 16 wherein a change in state of a specified code requires updating of a code that has the code numeric value of two times that of the code numeric value of the specified code and two times that of the code numeric value of the specified code plus one.

19. (Original) The method of claim 16 wherein a change in state of a specified code requires updating of a code that has the code numeric value of an integer less than or equal to half of the code numeric value of the specified code.

20. (Original) The method of claim 16 wherein a spreading factor of 1 code has a code numeric value of 1, spreading factor 2 codes have code numeric values of 2 and 3, spreading factor 4 codes have code numeric values of 4, 5, 6 and 7, spreading factor 8 codes have code numeric values of 8, 9, 10, 11, 12, 13, 14 and 15, spreading factor 16 codes have code numeric values of 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30 and 31.

21. (Original) A method for identifying codes in an orthogonal variable spreading factor (OVSF) code tree for use in code allocation, the tree having rows and each successive row down the tree having double a spreading factor of a preceding row, the method comprising:

sequentially numbering each code in the OVSF code tree, wherein codes having a same spreading factor are in sequence.

22.   (Original)   The method of claim 21 wherein the sequential number starts at a code having a lowest spreading factor and identifying that code as 1.

23.   (Original)   A method for indicating code availability for codes in an orthogonal variable spreading factor (OVSF) code tree for use in code allocation, the method comprising:

assigning each code an indicator, the indicator having two bits, a first of the two bits indicating whether the code is blocked by use of another code and a second of the two bits indicating whether the code is blocked by one or two codes.

24.   (Original)   The method of claim 23 wherein the first bit having a value of 0 indicates that the code is not blocked and the first bit having a value of 1 indicating that the code is blocked and the second bit having a value of 0 indicating that the code is blocked by one code and the second bit having a value of 1 indicating that the code is blocked by two codes.